Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

# ENVIRONMENTAL ASSESSMENT
**For Routine Actions with Limited Environmental Impact**

Note: Instructions to DNRC staff for preparing this EA can be found at: http://www.dnrc.state.mt.us/eis_ea.html

## Part I. Proposed Action Description

1. *Applicant/Contact name and address*: State of Montana Board of Land Commissioners
PO Box 201601
Helena, MT 59620

2. *Type of action*: Application for Beneficial Water Use Permit No. 40Q-30020129

3. *Water source name*: West Fork Poplar River

4. *Location affected by project*: SWSWSW Section 36, T36N, R43E, Daniels County

5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits*: This project is to pump water out of the West Fork Poplar River to be used for oil field operations. The proposed flow rate is 250 gpm and up to 30 acre-feet of water will be used per year. The point of diversion will be located in the SWSWSW Section 36, T36N, R43E, Daniels County. Water will be pumped into trucks where it will then be delivered to various oil well locations. The water will be used for a variety of oil field processes, including formation fracturing, acid treatments, cementing, well completions and well testing.

   The DNRC shall issue a water use permit if the applicant proves the criteria in 85-2-311, MCA are met.

6. *Agencies consulted during preparation of the Environmental Assessment: (include agencies with overlapping jurisdiction)*

   Montana Natural Heritage Program
   National Wetlands Inventory – Website
   Montana Department of Environmental Quality – Website
   MT Dept of Fish, Wildlife & Parks (Montana Rivers Information System) - Website

## Part II. Environmental Review

**1. Environmental Impact Checklist:**

# PHYSICAL ENVIRONMENT

**WATER QUANTITY, QUALITY AND DISTRIBUTION**

***Water quantity*** *- Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.*

*Determination*: The West Fork Poplar River is not identified as a chronically or periodically dewatered stream by the Montana Department of Fish, Wildlife & Parks.

***Water quality*** *- Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

*Determination:* The West Fork Poplar River is not identified as water quality impaired or threatened by the Montana Department of Environmental Quality. The appropriation should have no significant impact of water quality.

***Groundwater*** *- Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

*Determination*: The use of this surface water should not have a significant impact on groundwater water quality or supply.

**DIVERSION WORKS** *- Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

*Determination*: The water will be withdrawn from a natural pool in the stream using a portable 50 hp pump at a rate of 250 gpm. This project will be withdrawing relatively small quantities of water intermittently throughout the year as needed. Because of the numerous springs feeding the stream and pool there should be little, if any, draw-down of the pool and no significant impact on flow modifications, barriers, riparian areas or dams.

**UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES**

***Endangered and threatened species*** *- Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

*Determination*: According to a report from the Montana Natural Heritage Program there are no species of special concern in the general area of the project. As this project is to water for short periods of time as needed, it will not create a barrier to the migration or movement of fish or wildlife.

***Wetlands*** *- Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

*Determination*: The West Fork Poplar River is a braided stream with numerous areas where water pools. It also is fed by numerous springs. The proposed point of diversion will be withdrawing water out of one of these pools and according to the National Wetlands Inventory (website), the pool is identified as a palustrine wetland. This project will be withdrawing relatively small quantities of water, with a portable pump, intermittently throughout the year as needed. Because of the numerous springs feeding the stream and pool there should be little, if any, drawdown of the pool and no significant impact should occur.

***Ponds*** *- For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

*Determination*: Not applicable.

**GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE** - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

*Determination*: There is an existing road along side the river right off the highway that the trucks will use to access the water. Due to the minimal disturbance this project is not likely to degrade the soil quality, alter the soil stability or change the moisture content of the soil. The soils in the area may be susceptible to saline seep, however the use of this water should not contribute to any saline seep.

**VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS** - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

*Determination*: There is an existing road along side the river right off the highway that the trucks will use to access the water. With trucks delivering water to well sites throughout the area, there is the potential for the spread of noxious weeds. The point of diversion is located on state land and it is the responsibility of Trust Lands Management Division to control noxious weeds on the land they manage.

**AIR QUALITY** - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

*Determination*: No impacts at air quality are expected due to the operation of the well. There may be a minor impact due to the increased truck traffic at the well location.

**HISTORICAL AND ARCHEOLOGICAL SITES** - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.*

*Determination*: This project is to pump water out of the river to be used for oil field development. There is currently road access for the trucks at the proposed point of diversion. There will be no additional ground disturbance created as a result of issuing this permit. Due to

the minimal ground disturbance it is felt that a cultural resource inventory is not recommended at this time. Additionally, a cultural resource inventory was completed by the Glasgow Unit Office and no cultural resources were identified within the project area.

**DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY** - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

*Determination*: No additional impacts on other environmental resources were identified.

## HUMAN ENVIRONMENT

**LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS** - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

*Determination*: There are no known environmental plans or goals in this area.

**ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES** - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

*Determination*: This project will have no significant impact on recreational or wilderness activities.

**HUMAN HEALTH** - *Assess whether the proposed project impacts on human health.*

*Determination*: This application will have no significant impact on human health.

**PRIVATE PROPERTY** - *Assess whether there are any government regulatory impacts on private property rights.*
*Yes___ No_**X**_ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights*.

*Determination*: There are no additional regulatory impacts on private property rights associated with this application.

**OTHER HUMAN ENVIRONMENTAL ISSUES** - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

*Impacts on:*

(a) *Cultural uniqueness and diversity?* No significant impact.

(b) *Local and state tax base and tax revenues?* No significant impact.

(c) *Existing land uses?* No significant impact.

(d) *Quantity and distribution of employment?* No significant impact.

(e) *Distribution and density of population and housing?* No significant impact.

(f) *Demands for government services?* No significant impact.

(g) *Industrial and commercial activity?* No significant impact.

(h) *Utilities?* No significant impact.

(i) *Transportation?* No significant impact.

(j) *Safety?* No significant impact.

(k) *Other appropriate social and economic circumstances?* No significant impact.

**2. *Secondary and cumulative impacts on the physical environment and human population:***

Secondary Impacts: No secondary impacts have been identified.

Cumulative Impacts: No cumulative impacts have been identified.

**3. *Describe any mitigation/stipulation measures:*** None.

**4. *Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:*** Under the no action alternative, the applicant would need to find another source of water for the oil field development. This would require them to obtain water from another surface water source or drill a well.

## *PART III. Conclusion*

***1. Preferred Alternative:*** Issue the Beneficial Water Use Permit if the applicant proves the criteria in 85-2-402 are met.

***2 Comments and Responses***

**3. *Finding:***

*Based on the significance criteria evaluated in this EA, is an EIS required?* No

*If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action:* No significant impacts have been identified, therefore an EIS is not necessary.

*Name of person(s) responsible for preparation of EA:*

*Name:* Denise Biggar
*Title:* Water Resource Specialist
*Date*: June 23, 2006